

ADOBE IN ART NOUVEAU CONSTRUCTIONS IN AVEIRO

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Topic

Title: Raw materials and Art Nouveau

Abstract

The industrial revolution brought, along with major technological developments, a change of mindset that allowed the development of culture and flourishing of new artistic currents. The Art Nouveau movement flourishes in Europe in the end of the nineteenth century. In each country, this artistic movement assumed a distinct character, incorporating aesthetic elements of each nation, adapted to the reality of each country's traditional construction and materials available.

Aveiro is one of the Portuguese cities where magnificent examples of Art Nouveau movement can be found. Due to construction techniques traditionally used in the area and time period in which the Art Nouveau emerged, most buildings of this style and region were built using adobe blocks, a singularity worldwide. This type of construction has many advantages but also requires particular care to be taken into account in its proper maintenance and preservation. The rehabilitation of buildings of this type needs a special attention on the aspects related to materials and traditional solutions.



Fig. 1 – Major Pessoa House before intervention



Fig. 2 – Major Pessoa House after intervention

The common structural problems and pathologies of this type of buildings will be presented and discussed. Some aspects related to the appraisal and characterization previously to the rehabilitation works performed in one of the

most iconic examples of Aveiro: Major Pessoa House, reopened recently as the Art Nouveau Museum of Aveiro, will be discussed.

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Biographic Elements:

Cristina Oliveira has a PhD in Civil Engineering, from IST, Lisbon. She developed a scientific stage in the Kyodai Kyoto University's Structural Dynamics Laboratory, Japan. She is currently a Post-Doc researcher at Aveiro University, Portugal. Her research interests include seismic reinforcement of adobe constructions.

Humberto Varum is Associate Professor with Habilitation at the Civil Engineering Department of Aveiro University, Portugal. He is member of the National Committee of ICOMOS. His main research interests include earth construction characterization and seismic strengthening.

Aníbal Costa is Full Professor of the Civil Engineering Department of Aveiro University, Portugal. He has been developing research in structural evaluation, rehabilitation and reinforcement, as well as in seismic engineering.